

## PATENT COOPERATION TREATY

## PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference <b>E31720 EKR/ANY</b>	<b>FOR FURTHER ACTION</b> see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. <b>PCT/NO 2003/000335</b>	International filing date (day/month/year) <b>7 October 2003</b>	(Earliest) Priority Date (day/month/year) <b>8 October 2002</b>
Applicant <b>TJOTTA, ENOK</b>		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 6 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

## 1. Basis of the report

a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. ☐ With regard to any nucleotide and/or amino acid sequence disclosed in the international application, see Box No. I.

2. ☒ Certain claims were found unsearchable (see Box No. II)

3. ☐ Unity of invention is lacking (see Box No. III)

## 4. With regard to the title,

☐ the text is approved as submitted by the applicant.

☒ the text has been established by this Authority to read as follows:

Method for selection of compounds which inhibit clonal cell growth and use thereof

## 5. With regard to the abstract,

☐ the text is approved as submitted by the applicant.

☒ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

## 6. With regard to the drawings,

a. the figure of the drawings to be published with the abstract is Figure No. \_\_\_\_\_

☐ as suggested by the applicant.

☐ as selected by this Authority, because the applicant failed to suggest a figure.

☐ as selected by this Authority, because this figure better characterizes the invention.

b. ☒ none of the figures is to be published with the abstract.

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/N2003/000335

## Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☒ Claims Nos.: **11, 12 (partially)**  
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:  
**see extra sheet**
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.  
☐ No protest accompanied the payment of additional search fees.

## Box II.2

Present claim 11 relates to the use of substances defined by reference to a desirable characteristic or property, namely that the substances are obtained by the screening method of claims 1-9. The claim covers all substances having this characteristic or property, whereas the application provides support within the meaning of Article 6 PCT and disclosure within the meaning of Article 5 PCT for only a very limited number of such substances. In the present case, the claim so lacks support, and the application so lacks disclosure, that a meaningful search over the whole of the claimed scope is impossible. Independent of the above reasoning, the claim also lacks clarity (Article 6 PCT). An attempt is made to define the substances by reference to a result to be achieved. Again, this lack of clarity in the present case is such as to render a meaningful search over the whole of the claimed scope impossible.

Consequently, the search has been carried out for those parts of the claim which appear to be clear, supported and disclosed, namely those parts relating to the substance 4-OH-OPB, which is used in the examples.

Claims 11-12 relate partially to the treatment of diseases which are actually not well defined. The use of definitions "pathological processes related to the growth that were initiated by radioactivity or other physical effects" and "pathology induced by radioactivity or other physical effects" in the present context is considered to lead to a lack of clarity within the meaning of Article 6 PCT. It is not fully possible to determine the diseases for which protection might legitimately be sought. The lack of clarity is such as to render a meaningful complete search not fully possible.

Consequently, the search of claims 11-12 has been carried out for the defined pathological conditions, i.e. cancer, arteriosclerosis, autoimmunity and rejection of transplants.

Box No. IV Text of the abstract (Continuation of item 5 of the first sheet)

A three step method for selection and testing of compounds inhibiting clonal cell growth, consisting of 1) screening for substances that inhibit clonal growth in a culture, 2) in the same culture, testing whether a high local cell concentration (collocation) will decrease the inhibiting effect of such substances on clonal cell growth, and 3) testing if export of metastatic cells from a tumour site could be blocked by such substances. It should then be possible to decrease or even abolish the development of malignant disease or metastasis from primary tumours and development of benign tumours including atheromas in arteries. The method may also detect compounds that increase clonal growth. These compounds might possess carcinogenic properties or could be used for stimulation of a failing immune system.

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/NO 2003/000335

## A. CLASSIFICATION OF SUBJECT MATTER

IPC7: C12N 5/08

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: C12N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

WPI DATA, EPO-INTERNAL, PAJ, BIOSIS, MEDLINE

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	The Prostate, Volume 32, 1997, Sven de Vos et al, "Effects of Retinoid X Receptor-Selective Ligands on Proliferation of Prostate Cancer Cells", pages 115-121, abstract  --	1-10
A	Virology, Volume 23, No. 2, 1964, MacPherson I et al, "Agar Suspension Culture for the Selective Assay of Cells Transformed by Polyoma Virus", pages 291-294, see the whole document  --	1-10

☒ Further documents are listed in the continuation of Box C.☒ See patent family annex.

\* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&amp;" document member of the same patent family

Date of the actual completion of the international search

17 May 2004

Date of mailing of the international search report

19-05-2004

Name and mailing address of the ISA/

Swedish Patent Office

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## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>BIOSIS, accession no. PREV198172018181, Baird W M et al: " Comparison of the metabolism of benzo a pyrene and its activation to biologically active metabolites by low passage hamster and rat embryo cells", Carcinogenesis, vol. 2, No. 2, 1981 pages 81-88, abstract</p> <p>--</p>	1-10
A	<p>Journal of Clinical Hematogoy and Oncology, Volume 12, No. 3, 1982, Meischen SJ. et al, "Synthesis and anti tumor activity of N phosphonoacetyl-L-aspartato-1 2-diamino cyclo hexane platinum II", pages 67-76, see the whole document</p> <p>--</p>	1-10
X	<p>WO 0100585 A1 (A-VIRAL AS), 4 January 2001 (04.01.2001), page 3, page 9, last paragraph</p> <p>--</p>	11-12
X	<p>Gynecologic Oncology, Volume 17, No. 2, 1984, Weppelmann B et al, "The influence of prostaglandin antagonists on radiation therapy of carcinoma of the cervix", pages 196-199, abstract</p> <p>--</p>	11-12
X	<p>Journal of Surgical Research, Volume 54, Issue 1, January 1993, Diane K. Stoller et al, "Reduction of Atherosclerosis with Nonsteroidal Anti-Inflammatory Drugs", pages 7-11, abstract</p> <p>--</p>	11-12
A	<p>Atherosclerosis, Volume 54, No. 2, 1985, Bailey JM et al, "Anti-inflammatory drugs in experimental atherosclerosis. Part 6. Combination therapy with steroid and non-steroid agents, pages 205-212, abstract</p> <p>--</p> <p>-----</p>	11-12

INTERNATIONAL SEARCH REPORT  
Information on patent family members

30/04/2004

International application No.  
PCT/RU 2003/000335

WO	0100585	A1	04/01/2001	AU	5557500	A	31/01/2001
				CA	2377200	A	04/01/2001
				EP	1194409	A	10/04/2002
				GB	9915184	D	00/00/0000
				JP	2003503389	T	28/01/2003
				ZA	200200432	A	17/01/2003

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